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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,026	07/07/2006	Ian Robert Thomson	7790-X06-026	5003
27317	7590	01/18/2008	EXAMINER	
FLEIT KAIN GIBBONS GUTMAN BONGINI & BIANCO			FAYYAZ, NASHMIYA SAQIB	
21355 EAST DIXIE HIGHWAY				
SUITE 115			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/597,026	THOMSON ET AL.
	Examiner Nashmiya S. Fayyaz	Art Unit 2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 10-14, 16 and 17 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 and 15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9 and 15, drawn to a railway safety apparatus with a rotation detector, classified in class 73, subclass 865.9.
- II. Claims 10, 11 and 16, drawn to a railway safety apparatus with a transmitter, classified in class 73, subclass 596+.
- III. Claims 12-14 and 17, drawn to a screw threaded connector with two chemicals, classified in class 116, subclass 1+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II/III are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claims 1-9 are evidence claims that the combination does not require

the particulars of the subcombination for patentability. The subcombination has separate utility such as a railway safety tester employing ultrasonics to test the tightening of the bolt or a chemical tester of tightening.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because all the limitations of III are not found in II. The subcombination has

separate utility such as chemically testing the tightness with further usage of optical radiation.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Paul Bianco on January 15, 2008 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claim 10-17 have been withdrawn from further

consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-232938 (Tanese et al.). As to claims 1 and 4, Tanese et al. disclose a cap for detecting loosening of a rail tightening bolt including rotation indicator (cap 8) with lines 81 and 82 which is fitted onto head of bolt 4a; see Abstract translation and figs. 1 and 2. As to claim 2, the cap 8 is fitted on the head part 4a so that it would rotate with the bolt. As to claim 3, the cap is recited as made of hard and

elastic synthetic rubber or plastics and molded in a u-shape. As to claim 5, note the polygonal shape of head part 4a and the cap is recited as "fitted to" the bolt. As to claim 6, note mark 8b with lines 81 and 82 for visual inspection as recited in the Abstract.

9. Claims 1, 2, 4, 6-8 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-317306 (Takashima). As to claims 1 and 4, Takashima discloses a rotation state reading device for a rail including a rotation indicator (cap 8) on a bolt of rail 9, see abstract translation. As to claim 2, the cap is put on the bolt such that it would appear to rotate with the bolt. As to claim 6, indicia 80 on the cap to be compared to a reference. As to claims 7 and 15, note mobile detector (bogie 1) with reading device 2 for detecting an image of the cap. As to claim 8, note the figures which depict the bogie on rail 9.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-317306 (Takashima) in view of JP-232938 (Tanese et al). As to claims 3 and 5, Takashima fails to indicate the type of material used for the cap as being made of synthetic plastics. In a related prior art device, Tanese et al disclose a cap 8 for usage on rail bolts which is recited as being made of synthetic rubber or plastics, see Abstract translation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have specified that the cap of the Takashima was made of synthetic rubber or plastic given the teaching from the very similar Tanese et al reference since Takashima lacks a teaching for the type of material to use.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP-317306 (Takashima) in view of JP-42737. As to claim 9, Takashima lacks a teaching for the mobile detector to be mounted to an aircraft. In a related prior art device, JP-42737 discloses a railroad crossing monitor which employs imaging cameras to judge rail and further discloses that the monitoring apparatus could be mounted on a vehicle or an aircraft, see Abstract translation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to have substituted the rail vehicle of the Takashima device with aircraft monitoring since it is known to be able to monitor rail conditions with monitoring devices mounted on aircraft as taught by JP-42737.

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 1-9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the claim appears to only be a single means claim. In claim 2, both instances of "it" are unclear. In claim 15, it is unclear what is being claimed.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Mondays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Examiner
Art Unit 2856

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1/15/08



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